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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/762,073

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EXAMINER

NGUYEN, TU X

ART UNIT

PAPER NUMBER

2618

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/762,073

Applicant(s)

ICHIKAWA, YASUFUMI

Examiner

Tu X Nguyen

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-6,9,11-19,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-6,9,11-19,21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

Applicant's arguments with respect to claims 21-22, have been considered but are not persuasive.

In response to Applicant argument "there is no teaching of any adjusting of a power control step range based on a detected one or more of the change in the reception power of the received signal obtained by comparing the previous reception power with the current reception power, the transmission power of the distant station: and the transmission power of said apparatus. Neither is there any teaching of the level variation cycle of the received signal due to fading. Accordingly, the claims as amended are patentable over the reference". The Examiner respectfully disagrees; Takano only needs to meet one of the claim limitations but not all, claims 21-22 recites: ..... a communication state detector for detecting one or more of: a change in the..... due to fading, and the transmission power of the distant station and/or said apparatus (see col.6 lines 64-65 "a mean value of previous values of the transmission power output by the mobile unit" corresponds to "the transmission power of said apparatus").

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2-6, 9, 11-19 and 21-22, are rejected under 35 U.S.C. 102(e) as being anticipated by Takano (US Patent 5,924,043).

Regarding claim 21, Takano discloses a radio communications apparatus having a transmission power control feature for controlling the transmission power of said apparatus, said apparatus comprising:

- a transmission power control bit change detector for extracting a transmission power control bit from a signal received from a distant station (see col.6 lines 42-45, col.9 lines 7-9);

- a communication state detector for detecting one or more of: a change in the reception power of the received signal obtained by comparing a previous reception power with a current reception power, a level variation cycle of the received signal due to fading, and the transmission power of the distant station and/or said apparatus (see col.6 lines 64-65); and

- a transmission power control step range changer (see col.6 lines 42-53) for internally changing a variable power step amount of a transmission power control step based on both the transmission power control bit and the detected one or more of: change in the reception power of the received signal obtained by comparing the previous reception power with the current reception power, the level variation cycle of the received signal due to fading, the transmission power of the distant station, and the transmission power of said apparatus (see col.6 lines 64-65);

wherein said apparatus internally increases or decreases a transmission power of a transmitted signal to the distant station by the changed power step amount (see fig.20, element 105) in response to the transmission power control bit received from the distant station.

Regarding claim 22, Takano discloses a transmission power control method for a radio communications apparatus having a transmission power control feature for controlling the transmission power of said apparatus, said apparatus comprising:

a transmission power control bit change detector for extracting a transmission power control bit from a signal received from a distant station (see col.6 lines 42-45, col.9 lines 7-9);

a communication state detector for detecting one or more of: a change in the reception power of the received signal obtained by comparing a previous reception power with a current reception power, the level variation cycle of the received signal due to fading, and the transmission power of the distant station and/or said apparatus (see col.6 lines 64-65), and a change in the transmission power control bit;

the apparatus having a transmission power control step range changer (see col.6 lines 42-53) for internally changing a variable power step amount of a transmission power control step based on both the transmission power control bit and the detected one or more of: change in the reception power of the received signal obtained by comparing the previous reception power with the current reception power, the level variation cycle of the received signal due to fading, and the transmission power of the distant station, the transmission power of said apparatus (see col.6 lines 64-65), and the change in the transmission power control bit; wherein said apparatus internally increases or decreases a transmission power of a transmitted signal to the distant station by the changed power step amount (see fig.20, element 105) in response to the transmission power control bit received from the distant station.

Regarding claim 2, Takano discloses communication state detector has a reception power change detector which detects a change in reception power change detector which detects the change in reception power of the received signal (see col.9 lines 17-18).

Regarding claim 3, Takano discloses communication state detector has a transmitting station power change detector which detects the transmission power of the distant station (see col.9 lines 17-18).

Regarding claim 4, Takano discloses communication state detector has a control state detector which detects a control state of the apparatus (see col.13 lines 45-56).

Regarding claim 5, Takano discloses said communication state detector has a local station transmission power change detector which detects a change in transmission power of the apparatus (see col.6 lines 64-65).

Regarding claim 6, Takano discloses said communication state detector has a transmission power a transmission power control bit change detector which detects a change in said transmission power control bit (see col.5 lines 55-64).

Regarding claims 9 and 18, Takano discloses reception power change detector has a reception power threshold comparator which compares the reception power with a predetermined threshold (see col.2 lines 4-15, "Receive SIR" corresponds to "a reception power" and "reference SIR" corresponds to "a predetermined threshold").

Regarding claims 11-14, Takano discloses communication state detecting step has a reception power change detecting step which detects a change in reception power, wherein said transmission power control range changing step changes the variable power step amount depending on the detected change in reception power (see col.6 lines 50-54, col.8 lines 58-59,

“open loop control system” corresponds to “variable power step amount depending on the detected change in reception power”).

Regarding claim 15, Takano discloses the transmission power control apparatus according to detecting step has a reception power comparing step which compares a previous reception power with a current reception power, wherein a change in reception power is detected based on the comparison results of the reception power comparing step (see col.10 lines 5-10).

Regarding claim 16, Takano discloses said reception power change detecting step has a fading pitch detecting step which detects the fading pitch of reception power, wherein a change in reception power is detected based on the detected fading pitch (see col.13 lines 29-44).

Regarding claim 17, Takano discloses reception power change detecting step has a reception power comparing step which compares a previous reception power with a current reception power (see col.10 lines 5-8) and a fading pitch detecting step for detecting the fading pitch of reception power (see col.13 lines 37-44).

Regarding claim 19, Takano discloses a computer-readable recording medium for storing a program for use by a computer for executing the transmission power control method for the radio communications apparatus (see col.1 lines 6-11, it is inherent that the mobile station carries out the processing steps by the stored executable programming instructions).

## **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



May 31, 2007



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